

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

#### Thank you for accessing STN ####

Our services are currently unavailable. The regularly scheduled hours of operations are:

US Eastern time:                      Sunday from 01:00 (1:00 AM) until  
   Saturday at 22:00 (10:00 PM)

On the first Saturday of each month, STN is available only until 17:00 (5:00 PM).

Tokyo time:                            Sunday from 14:00 (2:00 PM) until  
   Sunday at 11:00 (11:00 AM)

On the Sunday of the first weekend of each month, STN is available only until 06:00 (6:00 AM).

Additionally, representatives from the Help Desk and Customer Service may be reached from 08:00 (8:00 AM) to 20:00 (8:00 PM) US Eastern time, Monday through Friday, at the following telephone numbers:

Help Desk                            - (800) 848-6533    North America  
   - (614) 447-3698    Elsewhere

Customer Service                   - (800) 753-4227    North America  
   - (614) 447-3731    Elsewhere

We can also be contacted via email at [HELP@CAS.ORG](mailto:HELP@CAS.ORG).

Connection closed by remote host

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:sssptl89dxw

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1                      Web Page for STN Seminar Schedule - N. America

NEWS 2 JAN 12 Match STN Content and Features to Your Information  
Needs, Quickly and Conveniently  
NEWS 3 JAN 25 Annual Reload of MEDLINE database  
NEWS 4 FEB 16 STN Express Maintenance Release, Version 8.4.2, Is  
Now Available for Download  
NEWS 5 FEB 16 Derwent World Patents Index (DWPI) Revises Indexing  
of Author Abstracts  
NEWS 6 FEB 16 New FASTA Display Formats Added to USGENE and PCTGEN  
NEWS 7 FEB 16 INPADOCDB and INPAFAMDB Enriched with New Content  
and Features  
NEWS 8 FEB 16 INSPEC Adding Its Own IPC codes and Author's E-mail  
Addresses  
NEWS 9 APR 02 CAS Registry Number Crossover Limits Increased to  
500,000 in Key STN Databases  
NEWS 10 APR 02 PATDPAFULL: Application and priority number formats  
enhanced  
NEWS 11 APR 02 DWPI: New display format ALLSTR available  
NEWS 12 APR 02 New Thesaurus Added to Derwent Databases for Smooth  
Sailing through U.S. Patent Codes  
NEWS 13 APR 02 EMBASE Adds Unique Records from MEDLINE, Expanding  
Coverage back to 1948  
NEWS 14 APR 07 CA/CAPLUS CLASS Display Streamlined with Removal of  
Pre-IPC 8 Data Fields  
NEWS 15 APR 07 50,000 World Traditional Medicine (WTM) Patents Now  
Available in CAPLUS  
NEWS 16 APR 07 MEDLINE Coverage Is Extended Back to 1947  
NEWS 17 JUN 16 WPI First View (File WPIFV) will no longer be  
available after July 30, 2010  
NEWS 18 JUN 18 DWPI: New coverage - French Granted Patents  
NEWS 19 JUN 18 CAS and FIZ Karlsruhe announce plans for a new  
STN platform  
NEWS 20 JUN 18 IPC codes have been added to the INSPEC backfile  
(1969-2009)

NEWS EXPRESS FEBRUARY 15 10 CURRENT WINDOWS VERSION IS V8.4.2,  
AND CURRENT DISCOVER FILE IS DATED 15 JANUARY 2010.

NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS LOGIN Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that  
specific topic.

All use of STN is subject to the provisions of the STN customer  
agreement. This agreement limits use to scientific research. Use  
for software development or design, implementation of commercial  
gateways, or use of CAS and STN data in the building of commercial  
products is prohibited and may result in loss of user privileges  
and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 13:00:00 ON 20 JUN 2010

=> index bioscience

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.22	0.22

FULL ESTIMATED COST

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE,  
AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS,

CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB,  
DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 13:00:20 ON 20 JUN 2010

62 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view  
search error messages that display as 0\* with SET DETAIL OFF.

=> s ferment? and inject? and pure(p)oxygen and sole(p)reactive(p)gas?

0\* FILE ADISNEWS  
0\* FILE ANTE  
0\* FILE AQUALINE  
0\* FILE BIOENG  
2\* FILE BIOTECHABS  
2\* FILE BIOTECHDS  
0\* FILE BIOTECHNO  
0\* FILE CEABA-VTB  
0\* FILE CIN  
22 FILES SEARCHED...  
0\* FILE FOMAD  
0\* FILE FROSTI  
0\* FILE FSTA  
33 FILES SEARCHED...  
2 FILE IFIPAT  
0\* FILE KOSMET  
0\* FILE NTIS  
0\* FILE PASCAL  
51 FILES SEARCHED...  
2 FILE USPATFULL  
0\* FILE WATER  
2 FILE WPIDS  
2 FILE WPINDEX

6 FILES HAVE ONE OR MORE ANSWERS, 62 FILES SEARCHED IN STNINDEX

L1 QUE FERMENT? AND INJECT? AND PURE(P)OXYGEN AND SOLE(P)REACTIVE(P)GAS?

=> file biotechabs biotechds ifipat uspatfull

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
2.07	2.29

FULL ESTIMATED COST

FILE 'BIOTECHABS' ACCESS NOT AUTHORIZED

FILE 'BIOTECHDS' ENTERED AT 13:02:21 ON 20 JUN 2010

COPYRIGHT (C) 2010 THOMSON REUTERS

FILE 'IFIPAT' ENTERED AT 13:02:21 ON 20 JUN 2010

COPYRIGHT (C) 2010 IFI CLAIMS(R) Patent Services (IFI)

FILE 'USPATFULL' ENTERED AT 13:02:21 ON 20 JUN 2010

CA INDEXING COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

=> s l1

PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH  
FIELD CODE - 'AND' OPERATOR ASSUMED 'PURE(P)OXYGEN'  
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH  
FIELD CODE - 'AND' OPERATOR ASSUMED 'SOLE(P)REACTIVE'  
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH  
FIELD CODE - 'AND' OPERATOR ASSUMED 'REACTIVE(P)GAS?'

L2 6 L1

=> dup rem l2  
PROCESSING COMPLETED FOR L2  
L3 2 DUP REM L2 (4 DUPLICATES REMOVED)

=> d l3 1-2

L3 ANSWER 1 OF 2 BIOTECHDS COPYRIGHT 2010 THOMSON REUTERS on STN DUPLICATE  
1  
AN 2007-16237 BIOTECHDS  
TI Fermentation process involves injecting stream of  
pure oxygen as sole reactive  
gas into the vessel while fermentation process is  
occurring;  
process optimization for use in fermentation  
AU BRAHMBHATT S R  
PA BRAHMBHATT S R  
PI US 20070087402 19 Apr 2007  
AI US 2006-552828 25 Oct 2006  
PRAI US 2006-552828 25 Oct 2006; US 2004-779828 17 Feb 2004  
DT Patent  
LA English  
OS WPI: 2007-456867 [44]

L3 ANSWER 2 OF 2 BIOTECHDS COPYRIGHT 2010 THOMSON REUTERS on STN DUPLICATE  
2  
AN 2005-23256 BIOTECHDS  
TI Fermentation process for producing e.g. chemicals, food,  
beverage, pharmaceuticals, and farm products, includes injecting  
stream of pure oxygen into fermentation  
vessel while fermentation process is occurring;  
for food and pharmaceutical industries  
AU BRAHMBHATT S R  
PA BRAHMBHATT S R  
PI US 20050181499 18 Aug 2005  
AI US 2004-779828 17 Feb 2004  
PRAI US 2004-779828 17 Feb 2004; US 2004-779828 17 Feb 2004  
DT Patent  
LA English  
OS WPI: 2005-554253 [56]

=> d hist

(FILE 'HOME' ENTERED AT 13:00:00 ON 20 JUN 2010)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE,  
AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS,  
CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB,  
DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 13:00:20 ON 20 JUN 2010

SEA FERMENT? AND INJECT? AND PURE(P)OXYGEN AND SOLE(P)REACTIVE(

-----  
0\* FILE ADISNEWS  
0\* FILE ANTE  
0\* FILE AQUALINE  
0\* FILE BIOENG  
2\* FILE BIOTECHABS  
2\* FILE BIOTECHDS  
0\* FILE BIOTECHNO  
0\* FILE CEABA-VTB  
0\* FILE CIN  
0\* FILE FOMAD  
0\* FILE FROSTI

```
0* FILE FSTA
2 FILE IFIPAT
0* FILE KOSMET
0* FILE NTIS
0* FILE PASCAL
2 FILE USPATFULL
0* FILE WATER
2 FILE WPIDS
2 FILE WPINDEX
L1 QUE FERMENT? AND INJECT? AND PURE(P)OXYGEN AND SOLE(P)REACTIVE(
-----
```

```
FILE 'BIOTECHDS, IFIPAT, USPATFULL' ENTERED AT 13:02:21 ON 20 JUN 2010
L2 6 S L1
L3 2 DUP REM L2 (4 DUPLICATES REMOVED)
```

```
=> log off
ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y)/N/HOLD:y
STN INTERNATIONAL LOGOFF AT 13:03:11 ON 20 JUN 2010
```

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:sssptl89dxw

PASSWORD:  
TERMINAL (ENTER 1, 2, 3, OR ?):2

\*\*\*\*\* Welcome to STN International \*\*\*\*\*

```
NEWS 1 Web Page for STN Seminar Schedule - N. America
NEWS 2 JAN 12 Match STN Content and Features to Your Information
Needs, Quickly and Conveniently
NEWS 3 JAN 25 Annual Reload of MEDLINE database
NEWS 4 FEB 16 STN Express Maintenance Release, Version 8.4.2, Is
Now Available for Download
NEWS 5 FEB 16 Derwent World Patents Index (DWPI) Revises Indexing
of Author Abstracts
NEWS 6 FEB 16 New FASTA Display Formats Added to USGENE and PCTGEN
NEWS 7 FEB 16 INPADOCDB and INPAFAMDB Enriched with New Content
and Features
NEWS 8 FEB 16 INSPEC Adding Its Own IPC codes and Author's E-mail
Addresses
NEWS 9 APR 02 CAS Registry Number Crossover Limits Increased to
500,000 in Key STN Databases
NEWS 10 APR 02 PATDPAFULL: Application and priority number formats
enhanced
NEWS 11 APR 02 DWPI: New display format ALLSTR available
NEWS 12 APR 02 New Thesaurus Added to Derwent Databases for Smooth
Sailing through U.S. Patent Codes
NEWS 13 APR 02 EMBASE Adds Unique Records from MEDLINE, Expanding
Coverage back to 1948
NEWS 14 APR 07 CA/Caplus CLASS Display Streamlined with Removal of
Pre-IPC 8 Data Fields
```

NEWS 15 APR 07 50,000 World Traditional Medicine (WTM) Patents Now Available in CAPLUS  
 NEWS 16 APR 07 MEDLINE Coverage Is Extended Back to 1947  
 NEWS 17 JUN 16 WPI First View (File WPIFV) will no longer be available after July 30, 2010  
 NEWS 18 JUN 18 DWPI: New coverage - French Granted Patents  
 NEWS 19 JUN 18 CAS and FIZ Karlsruhe announce plans for a new STN platform  
 NEWS 20 JUN 18 IPC codes have been added to the INSPEC backfile (1969-2009)  
 NEWS 21 JUN 21 Removal of Pre-IPC 8 data fields streamline displays in CA/CAPLUS, CASREACT, and MARPAT  
 NEWS 22 JUN 21 Access an additional 1.8 million records exclusively enhanced with 1.9 million CAS Registry Numbers -- EMBASE Classic on STN  
 NEWS 23 JUN 28 Introducing "CAS Chemistry Research Report": 40 Years of Biofuel Research Reveal China Now Atop U.S. in Patenting and Commercialization of Bioethanol  
 NEWS 24 JUN 29 Enhanced Batch Search Options in DGENE, USGENE, and PCTGEN

NEWS EXPRESS FEBRUARY 15 10 CURRENT WINDOWS VERSION IS V8.4.2, AND CURRENT DISCOVER FILE IS DATED 15 JANUARY 2010.

NEWS HOURS STN Operating Hours Plus Help Desk Availability  
 NEWS LOGIN Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN customer agreement. This agreement limits use to scientific research. Use for software development or design, implementation of commercial gateways, or use of CAS and STN data in the building of commercial products is prohibited and may result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 20:14:38 ON 15 JUL 2010

=> s substantially(p)pure(p)oxygen and ferment?  
 THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE  
 Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> index bioscience  
 FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED  
 COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.44	0.44

FULL ESTIMATED COST

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 20:15:51 ON 15 JUL 2010

62 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view

search error messages that display as 0\* with SET DETAIL OFF.

=> s substantially(p)pure(p)oxygen and ferment? and sole(p)gas?

0\* FILE ADISNEWS  
0\* FILE ANTE  
0\* FILE AQUALINE  
0\* FILE BIOENG  
1 FILE BIOSIS  
0\* FILE BIOTECHABS  
0\* FILE BIOTECHDS  
0\* FILE BIOTECHNO  
0\* FILE CEABA-VTB  
0\* FILE CIN

27 FILES SEARCHED...

0\* FILE FOMAD  
1\* FILE FROSTI  
0\* FILE FSTA  
4 FILE IFIPAT  
0\* FILE KOSMET  
0\* FILE NTIS  
0\* FILE PASCAL

53 FILES SEARCHED...

3 FILE USPATFULL  
1 FILE USPAT2  
0\* FILE WATER

5 FILES HAVE ONE OR MORE ANSWERS, 62 FILES SEARCHED IN STNINDEX

L1 QUE SUBSTANTIALLY(P)PURE(P)OXYGEN AND FERMENT? AND SOLE(P)GAS?

=> file biosis frosti ifipat uspatfull uspat2

COST IN U.S. DOLLARS

SINCE FILE TOTAL

ENTRY SESSION

FULL ESTIMATED COST

1.38 1.82

FILE 'BIOSIS' ENTERED AT 20:17:19 ON 15 JUL 2010

Copyright (c) 2010 The Thomson Corporation

FILE 'FROSTI' ENTERED AT 20:17:19 ON 15 JUL 2010

COPYRIGHT (C) 2010 Leatherhead Food Research Association

FILE 'IFIPAT' ENTERED AT 20:17:19 ON 15 JUL 2010

COPYRIGHT (C) 2010 IFI CLAIMS(R) Patent Services (IFI)

FILE 'USPATFULL' ENTERED AT 20:17:19 ON 15 JUL 2010

CA INDEXING COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 20:17:19 ON 15 JUL 2010

CA INDEXING COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

=> s l1

PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH

FIELD CODE - 'AND' OPERATOR ASSUMED 'STANTIALLY(P)PURE'

PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH

FIELD CODE - 'AND' OPERATOR ASSUMED 'PURE(P)OXYGEN'

PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH

FIELD CODE - 'AND' OPERATOR ASSUMED 'SOLE(P)GAS?'

L2 10 L1

=> dup rem l2

PROCESSING COMPLETED FOR L2

L3 5 DUP REM L2 (5 DUPLICATES REMOVED)

=> d 13 1-5

L3 ANSWER 1 OF 5 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN  
DUPLICATE 1  
AN 2010:367026 BIOSIS  
DN PREV201000367026  
TI Use of pure oxygen in viscous fermentation processes.  
AU Brahmabhatt, Sudhir [Inventor]; Anonymous  
CS Glencoe, MO USA  
ASSIGNEE: American Air Liquide Inc  
PI US 07/18405 20100518  
SO Official Gazette of the United States Patent and Trademark Office Patents,  
(MAY 18 2010)  
CODEN: OGUPE7. ISSN: 0098-1133.  
DT Patent  
LA English  
ED Entered STN: 23 Jun 2010  
Last Updated on STN: 23 Jun 2010

L3 ANSWER 2 OF 5 IFIPAT COPYRIGHT 2010 IFI on STN DUPLICATE 2  
AN 11437338 IFIPAT;IFIUDB;IFICDB  
TI Oxygen-Assisted Fermentation Process  
IN Brahmabhatt Sudhir R  
PA Unassigned Or Assigned To Individual (68000)  
PI US 20070087402 A1 20070419  
AI US 2006-552828 20061025 (11)  
RLI US 2004-779828 20040217 CONTINUATION PENDING  
FI US 20070087402 20070419  
DT Utility; Patent Application - First Publication  
FS CHEMICAL  
APPLICATION  
ED Entered STN: 19 Apr 2007  
Last Updated on STN: 7 May 2007  
CLMN 24

L3 ANSWER 3 OF 5 IFIPAT COPYRIGHT 2010 IFI on STN DUPLICATE 3  
AN 11415889 IFIPAT;IFIUDB;IFICDB  
TI USE OF PURE OXYGEN IN VISCOUS FERMENTATION PROCESSES  
IN Brahmabhatt Sudhir  
PA Unassigned Or Assigned To Individual (68000)  
PI US 20070065927 A1 20070322  
AI US 2006-530364 20060908 (11)  
PRAI US 2005-718462P 20050919 (Provisional)  
FI US 20070065927 20070322  
DT Utility; Patent Application - First Publication  
FS CHEMICAL  
APPLICATION  
OS CA 146:331971  
ED Entered STN: 23 Mar 2007  
Last Updated on STN: 12 Apr 2007  
CLMN 20

L3 ANSWER 4 OF 5 FROSTI COPYRIGHT 2010 LFRA on STN  
AN 719650 FROSTI  
TI Use of pure oxygen in viscous fermentation  
processes.  
IN Brahmabhatt S.  
PA LAir Liquide-SA a Directoire et Conseil de Surveillance pour L'etude et  
L'exploitation des Procédes Georges Claude  
SO PCT Patent Application  
FI WO 2007034271 A1 20070329



AI 20060912  
PRAI United States 20050919; 20060908  
NTE 20070329  
DT Patent  
LA English  
SL English

L3 ANSWER 5 OF 5 IFIPAT COPYRIGHT 2010 IFI on STN DUPLICATE 4  
AN 10942767 IFIPAT;IFIUDB;IFICDB  
TI Oxygen-assisted fermentation process; Directing  
substantially pure oxygen into  
fermentation medium in order to enhance efficiency of  
fermentation  
IN Brahmhatt Sudhir R  
PA Unassigned Or Assigned To Individual (68000)  
PPA American Air Liquide Inc (Probable)  
PI US 20050181499 A1 20050818  
AI US 2004-779828 20040217 (10)  
FI US 20050181499 20050818  
DT Utility; Patent Application - First Publication  
FS CHEMICAL  
APPLICATION  
OS CA 143:228042  
ED Entered STN: 19 Aug 2005  
Last Updated on STN: 6 Mar 2008  
CLMN 8

=> dup rem l5

L5 IS NOT VALID HERE

The L-number entered has not been defined in this session, or it  
has been deleted. To see the L-numbers currently defined in this  
session, enter DISPLAY HISTORY at an arrow prompt (=>).

=> d up rem l3

'REM' IS NOT A VALID FORMAT

In a multifile environment, a format can only be used if it is valid  
in at least one of the files. Refer to file specific help messages  
or the STNGUIDE file for information on formats available in  
individual files.

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):.

L3 ANSWER 1 OF 5 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN  
DUPLICATE 1  
AN 2010:367026 BIOSIS  
DN PREV201000367026  
TI Use of pure oxygen in viscous fermentation processes.  
AU Brahmhatt, Sudhir [Inventor]; Anonymous  
CS Glencoe, MO USA  
ASSIGNEE: American Air Liquide Inc  
PI US 07718405 20100518  
SO Official Gazette of the United States Patent and Trademark Office Patents,  
(MAY 18 2010)  
CODEN: OGUPE7. ISSN: 0098-1133.  
DT Patent  
LA English  
ED Entered STN: 23 Jun 2010  
Last Updated on STN: 23 Jun 2010

=> dup rem l3

PROCESSING COMPLETED FOR L3

L4 5 DUP REM L3 (0 DUPLICATES REMOVED)

=> d 14 1-5

L4 ANSWER 1 OF 5 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN  
AN 2010:367026 BIOSIS  
DN PREV201000367026  
TI Use of pure oxygen in viscous fermentation processes.  
AU Brahmabhatt, Sudhir [Inventor]; Anonymous  
CS Glencoe, MO USA  
ASSIGNEE: American Air Liquide Inc  
PI US 07/18405 20100518  
SO Official Gazette of the United States Patent and Trademark Office Patents,  
(MAY 18 2010)  
CODEN: OGUPE7. ISSN: 0098-1133.  
DT Patent  
LA English  
ED Entered STN: 23 Jun 2010  
Last Updated on STN: 23 Jun 2010

L4 ANSWER 2 OF 5 FROSTI COPYRIGHT 2010 LFRA on STN  
AN 719650 FROSTI  
TI Use of pure oxygen in viscous fermentation  
processes.  
IN Brahmabhatt S.  
PA LAir Liquide-SA a Directoire et Conseil de Surveillance pour Letude et  
LExploitation des Procedes Georges Claude  
SO PCT Patent Application  
PI WO 2007034271 A1 20070329  
AI 20060912  
PRAI United States 20050919; 20060908  
NTE 20070329  
DT Patent  
LA English  
SL English

L4 ANSWER 3 OF 5 IFIPAT COPYRIGHT 2010 IFI on STN  
AN 11437338 IFIPAT;IFIUDB;IFICDB  
TI Oxygen-Assisted Fermentation Process  
IN Brahmabhatt Sudhir R  
PA Unassigned Or Assigned To Individual (68000)  
PI US 20070087402 A1 20070419  
AI US 2006-552828 20061025 (11)  
RLI US 2004-779828 20040217 CONTINUATION PENDING  
FI US 20070087402 20070419  
DT Utility; Patent Application - First Publication  
FS CHEMICAL  
APPLICATION  
ED Entered STN: 19 Apr 2007  
Last Updated on STN: 7 May 2007  
CLMN 24

L4 ANSWER 4 OF 5 IFIPAT COPYRIGHT 2010 IFI on STN  
AN 11415889 IFIPAT;IFIUDB;IFICDB  
TI USE OF PURE OXYGEN IN VISCOUS FERMENTATION PROCESSES  
IN Brahmabhatt Sudhir  
PA Unassigned Or Assigned To Individual (68000)  
PI US 20070065927 A1 20070322  
AI US 2006-530364 20060908 (11)  
PRAI US 2005-718462P 20050919 (Provisional)  
FI US 20070065927 20070322  
DT Utility; Patent Application - First Publication

FS CHEMICAL  
APPLICATION  
OS CA 146:331971  
ED Entered STN: 23 Mar 2007  
Last Updated on STN: 12 Apr 2007  
CLMN 20

L4 ANSWER 5 OF 5 IFIPAT COPYRIGHT 2010 IFI on STN  
AN 10942767 IFIPAT;IFIUDB;IFICDB  
TI Oxygen-assisted fermentation process; Directing  
substantially pure oxygen into  
fermentation medium in order to enhance efficiency of  
fermentation  
IN Brahmabhatt Sudhir R  
PA Unassigned Or Assigned To Individual (68000)  
PPA American Air Liquide Inc (Probable)  
PI US 20050181499 A1 20050818  
AI US 2004-779828 20040217 (10)  
FI US 20050181499 20050818  
DT Utility; Patent Application - First Publication  
FS CHEMICAL  
APPLICATION  
OS CA 143:228042  
ED Entered STN: 19 Aug 2005  
Last Updated on STN: 6 Mar 2008  
CLMN 8

=> d hist

(FILE 'HOME' ENTERED AT 20:14:38 ON 15 JUL 2010)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE,  
AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS,  
CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB,  
DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 20:15:51 ON 15 JUL 2010  
SEA SUBSTANTIALLY(P)PURE(P)OXYGEN AND FERMENT? AND SOLE(P)GAS?

-----  
0\* FILE ADISNEWS  
0\* FILE ANTE  
0\* FILE AQUALINE  
0\* FILE BIOENG  
1 FILE BIOSIS  
0\* FILE BIOTECHABS  
0\* FILE BIOTECHDS  
0\* FILE BIOTECHNO  
0\* FILE CEABA-VTB  
0\* FILE CIN  
0\* FILE FOMAD  
1\* FILE FROSTI  
0\* FILE FSTA  
4 FILE IFIPAT  
0\* FILE KOSMET  
0\* FILE NTIS  
0\* FILE PASCAL  
3 FILE USPATFULL  
1 FILE USPAT2  
0\* FILE WATER

L1 QUE SUBSTANTIALLY(P)PURE(P)OXYGEN AND FERMENT? AND SOLE(P)GAS?

-----

FILE 'BIOSIS, FROSTI, IFIPAT, USPATFULL, USPAT2' ENTERED AT 20:17:19 ON

15 JUL 2010

L2 10 S L1  
L3 5 DUP REM L2 (5 DUPLICATES REMOVED)  
L4 5 DUP REM L3 (0 DUPLICATES REMOVED)

=> s SUBSTANTIALLY(P)PURE(P)OXYGEN AND FERMENT? AND only(P)gas?

PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH  
FIELD CODE - 'AND' OPERATOR ASSUMED 'STANTIALLY(P)PURE'  
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH  
FIELD CODE - 'AND' OPERATOR ASSUMED 'PURE(P)OXYGEN'  
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH  
FIELD CODE - 'AND' OPERATOR ASSUMED 'ONLY(P)GAS?'

L5 5 SUBSTANTIALLY(P) PURE(P) OXYGEN AND FERMENT? AND ONLY(P) GAS?

=> d 15 1-5

L5 ANSWER 1 OF 5 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN  
AN 1990:217196 BIOSIS  
DN PREV199089114486; BA89:114486  
TI CRITICAL ASSESSMENT OF THE STEADY-STATE SODIUM SULFITE FEEDING METHOD FOR  
K-A MEASUREMENT IN FERMENTORS.  
AU LINEK V [Reprint author]; BENES P; SINKULE J  
CS INST CHEM TECHNOL, DEP CHEM ENGINEERING, 166 28 PRAGUE 6, CZECHOSLOVAKIA  
SO Biotechnology and Bioengineering, (1990) Vol. 35, No. 8, pp. 766-770.  
CODEN: BIBIAU. ISSN: 0006-3592.  
DT Article  
FS BA  
LA ENGLISH  
ED Entered STN: 10 May 1990  
Last Updated on STN: 10 May 1990

L5 ANSWER 2 OF 5 IFIPAT COPYRIGHT 2010 IFI on STN  
AN 11437338 IFIPAT;IFIUDB;IFICDB  
TI Oxygen-Assisted Fermentation Process  
IN Brahmabhatt Sudhir R  
PA Unassigned Or Assigned To Individual (68000)  
PI US 20070087402 A1 20070419  
AI US 2006-552828 20061025 (11)  
RLI US 2004-779828 20040217 CONTINUATION PENDING  
FI US 20070087402 20070419  
DT Utility; Patent Application - First Publication  
FS CHEMICAL  
APPLICATION  
ED Entered STN: 19 Apr 2007  
Last Updated on STN: 7 May 2007  
CLMN 24

L5 ANSWER 3 OF 5 IFIPAT COPYRIGHT 2010 IFI on STN  
AN 11415889 IFIPAT;IFIUDB;IFICDB  
TI USE OF PURE OXYGEN IN VISCOUS FERMENTATION PROCESSES  
IN Brahmabhatt Sudhir  
PA Unassigned Or Assigned To Individual (68000)  
PI US 20070065927 A1 20070322  
AI US 2006-530364 20060908 (11)  
PRAI US 2005-718462P 20050919 (Provisional)  
FI US 20070065927 20070322  
DT Utility; Patent Application - First Publication  
FS CHEMICAL  
APPLICATION  
OS CA 146:331971  
ED Entered STN: 23 Mar 2007  
Last Updated on STN: 12 Apr 2007

CLMN 20

L5 ANSWER 4 OF 5 IFIPAT COPYRIGHT 2010 IFI on STN  
AN 10942767 IFIPAT;IFIUBD;IFICDB  
TI Oxygen-assisted fermentation process; Directing  
substantially pure oxygen into  
fermentation medium in order to enhance efficiency of  
fermentation  
IN Brahmabhatt Sudhir R  
PA Unassigned Or Assigned To Individual (68000)  
PPA American Air Liquide Inc (Probable)  
PI US 20050181499 A1 20050818  
AI US 2004-779828 20040217 (10)  
FI US 20050181499 20050818  
DT Utility; Patent Application - First Publication  
FS CHEMICAL  
APPLICATION  
OS CA 143:228042  
ED Entered STN: 19 Aug 2005  
Last Updated on STN: 6 Mar 2008  
CLMN 8

L5 ANSWER 5 OF 5 IFIPAT COPYRIGHT 2010 IFI on STN  
AN 05196993 IFIPAT;IFIUBD;IFICDB  
TI USE OF PURE OXYGEN IN VISCOUS FERMENTATION PROCESSES  
IN Brahmabhatt Sudhir  
PA American Air Liquide Inc (21034)  
PI US 7718405 B2 20100518  
US 20070065927 A1 20070322  
AI US 2006-530364 20060908 (11)  
PRAI US 2005-718462P 20050919 (Provisional)  
FI US 7718405 20100518  
DT Utility; Granted Patent - Utility, with Pre-Grant Publication  
FS CHEMICAL  
GRANTED  
ED Entered STN: 19 May 2010  
Last Updated on STN: 19 May 2010  
CLMN 6

=> d hist

(FILE 'HOME' ENTERED AT 20:14:38 ON 15 JUL 2010)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE,  
AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS,  
CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB,  
DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 20:15:51 ON 15 JUL 2010  
SEA SUBSTANTIALLY(P)PURE(P)OXYGEN AND FERMENT? AND SOLE(P)GAS?

-----  
0\* FILE ADISNEWS  
0\* FILE ANTE  
0\* FILE AQUALINE  
0\* FILE BIOENG  
1 FILE BIOSIS  
0\* FILE BIOTECHABS  
0\* FILE BIOTECHDS  
0\* FILE BIOTECHNO  
0\* FILE CEABA-VTB  
0\* FILE CIN  
0\* FILE FOMAD  
1\* FILE FROSTI

```

0* FILE FSTA
4 FILE IFIPAT
0* FILE KOSMET
0* FILE NTIS
0* FILE PASCAL
3 FILE USPATFULL
1 FILE USPAT2
0* FILE WATER
L1 QUE SUBSTANTIALLY(P)PURE(P)OXYGEN AND FERMENT? AND SOLE(P)GAS?
-----

```

```

FILE 'BIOSIS, FROSTI, IFIPAT, USPATFULL, USPAT2' ENTERED AT 20:17:19 ON
15 JUL 2010
L2 10 S L1
L3 5 DUP REM L2 (5 DUPLICATES REMOVED)
L4 5 DUP REM L3 (0 DUPLICATES REMOVED)
L5 5 S SUBSTANTIALLY(P)PURE(P)OXYGEN AND FERMENT? AND ONLY(P)GAS?

```

```

=> logoff
ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y)/N/HOLD:y
COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 45.08 46.90

```

STN INTERNATIONAL LOGOFF AT 20:19:15 ON 15 JUL 2010

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:sssptl89dxw

PASSWORD:  
 TERMINAL (ENTER 1, 2, 3, OR ?):2

\*\*\*\*\* Welcome to STN International \*\*\*\*\*

```

NEWS 1 Web Page for STN Seminar Schedule - N. America
NEWS 2 OCT 04 Precision of EMBASE searching enhanced with new
chemical name field
NEWS 3 OCT 06 Increase your retrieval consistency with new formats or
for Taiwanese application numbers in CA/CAPLUS.
NEWS 4 OCT 21 CA/CAPLUS kind code changes for Chinese patents
increase consistency, save time
NEWS 5 OCT 22 New version of STN Viewer preserves custom
highlighting of terms when patent documents are
saved in .rtf format
NEWS 6 OCT 28 INPADOCDB/INPAFAMDB: Enhancements to the US national
patent classification.
NEWS 7 NOV 03 New format for Korean patent application numbers in
CA/CAPLUS increases consistency, saves time.
NEWS 8 NOV 04 Selected STN databases scheduled for removal on
December 31, 2010
NEWS 9 NOV 18 PROUSDDR and SYNTHLINE Scheduled for Removal
December 31, 2010 by Request of Prous Science

```

NEWS 10 NOV 22 Higher System Limits Increase the Power of STN  
Substance-Based Searching  
NEWS 11 NOV 24 Search an additional 46,850 records with MEDLINE  
backfile extension to 1946  
NEWS 12 DEC 14 New PNK Field Allows More Precise Crossover among STN  
Patent Databases  
NEWS 13 DEC 18 ReaxysFile available on STN  
NEWS 14 DEC 21 CAS Learning Solutions -- a new online training experience  
NEWS 15 DEC 22 Value-Added Indexing Improves Access to World Traditional  
Medicine Patents in CAPLUS  
NEWS 16 JAN 24 The new and enhanced DPCI file on STN has been released  
NEWS 17 JAN 26 Improved Timeliness of CAS Indexing Adds Value to  
USPATFULL and USPAT2 Chemistry Patents  
NEWS 18 JAN 26 Updated MeSH vocabulary, new structured abstracts, and  
other enhancements improve searching in STN reload of  
MEDLINE  
NEWS 19 JAN 28 CABA will be updated weekly  
NEWS 20 FEB 23 PCTFULL file on STN completely reloaded  
NEWS 21 FEB 23 STN AnaVist Test Projects Now Available for  
Qualified Customers  
NEWS 22 FEB 25 LPCI will be replaced by LDPCI  
NEWS 23 MAR 07 Pricing for SELECTing Patent, Application, and Priority  
Numbers in the USPAT and IFI Database Families is Now  
Consistent with Similar Patent Databases on STN

NEWS EXPRESS 17 DECEMBER 2010 CURRENT WINDOWS VERSION IS V8.4.2 .1,  
AND CURRENT DISCOVER FILE IS DATED 24 JANUARY 2011.

NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS LOGIN Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that  
specific topic.

All use of STN is subject to the provisions of the STN customer  
agreement. This agreement limits use to scientific research. Use  
for software development or design, implementation of commercial  
gateways, or use of CAS and STN data in the building of commercial  
products is prohibited and may result in loss of user privileges  
and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 18:09:08 ON 13 MAR 2011

=> index bioscience		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.46	0.46

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE,  
AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS,  
CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB,  
DRUGU, EMBAL, EMBASE, ESBIOBASE, ...' ENTERED AT 18:10:16 ON 13 MAR 2011

56 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view  
search error messages that display as 0\* with SET DETAIL OFF.

=> s ferment? and oxygen and recyl? and head(p)space and predetermined and pressure  
0\* FILE ADISNEWS

```

0* FILE ANTE
0* FILE AQUALINE
0* FILE BIOENG
0* FILE BIOTECHABS
0* FILE BIOTECHDS
0* FILE BIOTECHNO
0* FILE CEABA-VTB
0* FILE CIN
23 FILES SEARCHED...
0* FILE FOMAD
0* FILE FROSTI
0* FILE FSTA
2 FILE IFIPAT
0* FILE KOSMET
0* FILE NTIS
0* FILE PASCAL
45 FILE USPATFULL
49 FILES SEARCHED...
1 FILE USPATOLD
9 FILE USPAT2
0* FILE WATER
1 FILE WPIDS
1 FILE WPINDEX

```

6 FILES HAVE ONE OR MORE ANSWERS, 56 FILES SEARCHED IN STINDEX

L1 QUE FERMENT? AND OXYGEN AND RECYCL? AND HEAD(P)SPACE AND PREDETERMINED AND PRESSURE

=> file ifipat uspatfull uspatold uspat2

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.13	2.59

FILE 'IFIPAT' ENTERED AT 18:12:00 ON 13 MAR 2011  
 COPYRIGHT (C) 2011 IFI CLAIMS(R) Patent Services (IFI)

FILE 'USPATFULL' ENTERED AT 18:12:00 ON 13 MAR 2011  
 CA INDEXING COPYRIGHT (C) 2011 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATOLD' ENTERED AT 18:12:00 ON 13 MAR 2011  
 CA INDEXING COPYRIGHT (C) 2011 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 18:12:00 ON 13 MAR 2011  
 CA INDEXING COPYRIGHT (C) 2011 AMERICAN CHEMICAL SOCIETY (ACS)

=> s l1  
 L2 57 L1

=> dup rem l2  
 PROCESSING COMPLETED FOR L2  
 L3 55 DUP REM L2 (2 DUPLICATES REMOVED)

=> s l3 and inject?  
 L4 43 L3 AND INJECT?

=> s l4 and continuo?  
 L5 34 L4 AND CONTINUO?

=> s l5 and pure(p)oxygen?  
 L6 15 L5 AND PURE(P) OXYGEN?



=> s l6 and supply and (sole or only)(p)gas  
L7 2 L6 AND SUPPLY AND (SOLE OR ONLY) (P) GAS

=> d l7 1-2

L7 ANSWER 1 OF 2 IFIPAT COPYRIGHT 2011 IFI on STN  
AN 11437338 IFIPAT;IFIUDB;IFICDB  
TI Oxygen-Assisted Fermentation Process  
IN Brahmabhatt Sudhir R  
PA Unassigned Or Assigned To Individual (68000)  
PI US 20070087402 A1 20070419  
AI US 2006-552828 20061025 (11)  
RLI US 2004-779828 20040217 CONTINUATION PENDING  
FI US 20070087402 20070419  
DT Utility; Patent Application - First Publication  
FS CHEMICAL  
APPLICATION  
ED Entered STN: 19 Apr 2007  
Last Updated on STN: 7 May 2007  
CLMN 24

L7 ANSWER 2 OF 2 IFIPAT COPYRIGHT 2011 IFI on STN  
AN 10942767 IFIPAT;IFIUDB;IFICDB  
TI Oxygen-assisted fermentation process; Directing  
substantially pure oxygen into fermentation  
medium in order to enhance efficiency of fermentation  
IN Brahmabhatt Sudhir R  
PA Unassigned Or Assigned To Individual (68000)  
PPA Mg Industries  
PPA Allig  
PPA American Air Liquide Inc  
PPA Messer Griesheim Ind LLC (Probable)  
PI US 20050181499 A1 20050818 (CITED IN 001 LATER PATENTS)  
AI US 2004-779828 20040217 (10)  
FI US 20050181499 20050818  
DT Utility; Patent Application - First Publication  
FS CHEMICAL  
APPLICATION  
OS CA 143:228042  
ED Entered STN: 19 Aug 2005  
Last Updated on STN: Jan 2011  
CLMN 8

=> d hist

(FILE 'HOME' ENTERED AT 18:09:08 ON 13 MAR 2011)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE,  
AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS,  
CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB,  
DRUGU, EMBAL, EMBASE, ESBIOBASE, ...' ENTERED AT 18:10:16 ON 13 MAR 2011  
SEA FERMENT? AND OXYGEN AND RECYCL? AND HEAD(P)SPACE AND PREDET

-----  
0\* FILE ADISNEWS  
0\* FILE ANTE  
0\* FILE AQUALINE  
0\* FILE BIOENG  
0\* FILE BIOTECHABS  
0\* FILE BIOTECHDS  
0\* FILE BIOTECHNO  
0\* FILE CEABA-VTB

```

0* FILE CIN
0* FILE FOMAD
0* FILE FROSTI
0* FILE FSTA
2 FILE IFIPAT
0* FILE KOSMET
0* FILE NTIS
0* FILE PASCAL
45 FILE USPATFULL
1 FILE USPATOLD
9 FILE USPAT2
0* FILE WATER
1 FILE WPIDS
1 FILE WPINDEX
L1 QUE FERMENT? AND OXYGEN AND RECYCL? AND HEAD(P)SPACE AND PREDET
-----

```

FILE 'IFIPAT, USPATFULL, USPATOLD, USPAT2' ENTERED AT 18:12:00 ON 13 MAR 2011

```

L2      57 S L1
L3      55 DUP REM L2 (2 DUPLICATES REMOVED)
L4      43 S L3 AND INJECT?
L5      34 S L4 AND CONTINUO?
L6      15 S L5 AND PURE(P)OXYGEN?
L7      2 S L6 AND SUPPLY AND (SOLE OR ONLY)(P)GAS

```

=> logoff

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:y

COST IN U.S. DOLLARS

	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	11.87	14.46

STN INTERNATIONAL LOGOFF AT 18:14:28 ON 13 MAR 2011